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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/591,467	09/01/2006	Takeshi Kimura	040302-0592	1871

22428 7590 02/19/2010  
FOLEY AND LARDNER LLP  
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3000 K STREET NW  
WASHINGTON, DC 20007

EXAMINER
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ALGAHAIM, HELAL A

ART UNIT	PAPER NUMBER
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3663

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/591,467	<b>Applicant(s)</b> KIMURA ET AL.	
	<b>Examiner</b> HELAL A. ALGAHAIM	<b>Art Unit</b> 3663	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 November 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6,9-11,15,16,19,20 and 38-40 is/are pending in the application.
- 4a) Of the above claim(s) 7,8,12-14,17,18 and 21-37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6,9-11,15,16,19 and 38-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

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## **DETAILED ACTION**

### ***Response to Amendment***

1. This action is in response to amendment filed on 11/13/2009. Claims 7-8, 12-14, 17-18 and 21-37 have been withdrawn. Claims 1-2, 9, 16 and 20 have been amended. Claims 38-40 are newly added.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims **1-6, 9-11, 15-16 and 19-20** are rejected under 35 U.S.C. 102(b) as being anticipated by **Seto et al (Pub. Number: 2003/0067219) in view of Dudeck et al (Patent Number: 6021375)**.

**Regarding claim 1:** Seto et al disclose a system for assisting a driver operating a vehicle traveling on a road, the system comprising:

a device arrangement configured to determine an obstacle as a target obstacle in a path of the vehicle and providing information on the target obstacle and width of the target obstacle (see **fig. 1, fig. 3 and fig. 4**).

a device configured to detect a status of the vehicle (see at least **fig. 1**)

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a device configured to determine a risk that the vehicle may come into contact with the target obstacle based on the information on the target obstacle and the detected status of the vehicle (see at least fig. 2, , fig. 4 and page 2, paragraph 0024)

a control arrangement configured to regulate **at least one of** a reaction force input to the driver and a force applied to the vehicle based on the determined risk and the width of the target obstacle. **Seto discloses the preceding vehicle is detected as an object placed in a zone having a certain width, see paragraph 0032. Also, Seto discloses the lateral moved distance, at least see fig. 3. Seto does not explicitly disclose corrects the control amount on the bases of the measured width. However, Urai disclose this limitation, at least see fig. 2, fig. . It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Urai in Seto to improve the driving safety of a vehicle.**

**Regarding claim 2:** Seto et al disclose the system as recited in claim 1, wherein the control arrangement includes a controller configured to regulate the reaction force input to the driver in response to a control amount determined based on the determined risk (see at least Urai fig. 2-6).

**Regarding claim 3:** Seto et al disclose the system as recited in claim 2, wherein the device arrangement includes a width measurement device configured to measures a width of the target obstacle, and the control arrangement includes a correction device that corrects the control amount on the bases of the measured width of the target obstacle (see Urai fig. 2, fig. 3 and fig. 6).

**Regarding claim 4:** Seto et al disclose the system as recited in claim 3, wherein the force applied to the vehicle is at least one of a driving force and a braking force (see at least fig. 2)

**Regarding claim 5:** Seto et al disclose the system as recited in claim 3, wherein the smaller the width of the target obstacle, the smaller the correction of the control amount (**see at least page 2, paragraph 0026, 0027 and 0028**).

**Regarding claim 6:** Seto et al disclose the system as recited in claim 3, wherein the correction device is configured to correct the control amount based on the measured width upon determining that the vehicle is overtaking the target obstacle (**see at least fig. 2 and page 2, paragraph 0026, 0027 and 0028**).

**Regarding claim 9:** Seto et al disclose the system as recited in claim 1, wherein the reaction force is from a driver controlled input device, wherein the control arrangement is configured to regulate the reaction force for lateral control of the vehicle (**see at least Urai fig. 2-6**).

**Regarding claim 10:** Seto et al disclose the system as recited in claim 9, wherein the driver controlled input device is a steering wheel (**see at least abstract**).

**Regarding claims 38-40:** Seto et al disclose the system as recited in claim 1, wherein the path of the vehicle is an estimated path (**see at least fig. 3, fig. 4 and page 2, paragraph 0030**).

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Regarding claims 38-40: Seto et al disclose the system as recited in claim 1, wherein the control arrangement is configured to vary an amount of the reaction force as the width of the target obstacle changes (**at least see Urai fig. 2-6**).

**Regarding claims 15-16 and 19-20:** They're rejected using the same prior arts and same rationales as claims **1-6 and 9-11** above.

#### ***Response to Arguments***

Applicant's arguments in regards to claims above have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HELAL A. ALGAHAIM whose telephone number is (571)270-5227. The examiner can normally be reached on Monday - Friday from 7:30 AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack W. Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/H. A. A./

Examiner, Art Unit 3663

/Mark Hellner/

Primary Examiner, Art Unit 3663